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25X1

1. Cathode production: Tubes which are pre-drawn of nickel with dimensions of 12 by 1 by Buntmetallwerk Hettstedt are delivered to O W for the production of cathodes. During acceptance inspection up to 80 percent of the tubes have been found defective. Chemical analysis shows too high a content of manganese and carbon; during the mechanical tests inadmissable drawing striations and overlappings are found which have been formed during rolling. Usable pre-drawn tubes go from OSW to Roehrenwerk Neuhaus, Thuringia where the drawing is completed. The Warnke firm then cuts the tubes into the desired lengths; the finished tubes go back to OSW. This roundabout method was to be shortened after 1 January 1953 so that Hettstedt would send the pre-drawn tubes directly to Neuhaus. Since Neuhaus does no chemical analysis or checking of mechanical errors, many breaks and splits in the tubes occur during further processing - for example when rivets are hammered on and small bands welded. Impurities in the nickel plate cause gas formation and make the finished tubes unusable. Defective tubes from Neuhaus amount to about 50 percent.

2. Anode production: So-called P-2 iron is used in the manufacture of anodes. P-2 has not yet been produced in the DDR; it therefore represents a considerable bottleneck. In January however, a railroad carload of this material arrived at OSW from the West, [redacted] This amount should suffice for anode manufacture at OSW for several years. 25X1

3. Metal-Ceramic tubes for wave lengths of 9-12 centimeters: OSW now has an order to produce over 6,000 metal-ceramic tubes of types: LD 11, 12, LD 7 and 9, with a delivery date set for 1 April 1953. Difficulties are being met in completing this order because of porous brazing. Ceramic parts are often found during acceptance tests to be cracked and porous. The annealing furnaces for the sintering and brazing of the ceramic parts often fail because the hydrogen used as a protective gas is not always available.

25 YEAR RE-REVIEW

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Because of lack of this gas, the furnaces are sometimes out of commission up to 24 hours. A metal layer of molybdenum is fused onto the ceramic parts of the tubes, then the layer is smeared with a silver solution and brazed with silver. Because of [illegible] Soviet acceptance requirements additional manufacturing and testing equipment worth about 400,000 DM has had to be procured for this production branch. The Russian acceptance official (fnu) Bucharin is no longer at OSW. His successor is fnu Nowotgorski. About 200 persons work in the metal-ceramic tube section; it is reported that because of continuing deficiencies in production they show no interest in their work. People who do not work in the plant are barred from the department; special pass is needed to enter the area.

4. The wire works of OSW have now been taken over by Berlin Gluehlampenwerk (formerly Osram). The branch plant TBF, which makes signal apparatus, again is part of the HFT combine.

5. Picture tubes: Frequent Russian complaints and rejections have been received in the case of picture tubes. The cause is usually imperfect focusing which leads to unclear pictures. The little bands on the cathodes frequently tear off because of shaking. Since October 1952, over 8,000 defective picture tubes have been returned. Russian (fnu) Jaroschenko has often refused to accept the tubes because of the green fluorescent screen covering (Leuchtschirmbelaege). The fluorescent material (Leuchtstoff) received from Russia is still not of the quality of that produced at Niebenstein in Thuringia. Frau (fnu) Thurley is responsible for Leuchtstoff procurement at OSW.

6. Miniature tubes: The following types of miniature tubes are presently being manufactured at OSW: AL 5, AK 5, AC 5, EC 81. Chemically pure nickel plate is an especial bottleneck in this production. Time and again there has been difficulty in obtaining the correct chemical composition of coil paste for cathodes. Although many scientists are trying to alleviate the difficulties, no progress is being made.

7. Equipment development: The Russians have withdrawn development orders for the following devices:

Spectrometer
Field intensity meter (Feldstaerkemesser)
Quality factor meter (Guetefaktormesser)
Oscillograph

OSW has already put considerable money into these orders; it has now attempted to get the Russians to agree to help in the sale of already-completed devices elsewhere in order to receive some return on its investment. The Russians, however, were completely uninterested in the plan; OSW alone must now overcome the problem.